

# Notice of Allowability

Application No.

10/783,500

Examiner

LaTanya Bibbins

Applicant(s)

HIRAYAMA, HIDEKI

Art Unit

2627

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 06 March 2007.
2. ☒ The allowed claim(s) is/are 1-3 and 5-10 (to be renumbered 1-9).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

WAYNE YOUNG  
SUPERVISORY PATENT EXAMINER

## DETAILED ACTION

### *Allowable Subject Matter*

1. Claims 1-3 and 5-10 (to be renumbered 1-9) are allowed.
2. The following is examiner's statement of reasons for allowance:

**Regarding independent claim 1**, none of the references of record, alone or in combination suggest or fairly teach a decoder for demodulating address information using a wobble signal wherein **the demodulator samples the wobble signal using the first clock signal until the second clock signal is synchronized with the wobble signal and samples the wobble signal Using the second clock signal after the second clock signal is synchronized with the wobble signal.**

**Regarding independent claim 7**, none of the references of record, alone or in combination suggest or fairly teach a decoder for demodulating address information using a wobble signal including **a demodulator, connected to the digital PLL circuit, the analog PLL circuit, and the detection circuit, for sampling the wobble signal using the first clock signal to demodulate the address information when the select signal is inactive and for sampling the wobble signal using the second clock signal to demodulate the address information when the select signal is active.**

### *Citation of Relevant Prior Art*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Chen (US Patent Number 5,675,620)** teaches a PLL circuit to be used in a variety of applications. While Chen teaches a circuit with first and second PLLs having a single input coupled to both PLL circuits (Figure 1 elements 12, 14, and the CLOCK\_IN input), both PLL circuits are analog.

**Hase et al. (US Patent Number 5,937,020)** discloses an analog PLL (Figures 3, 4, and 5 element 1) and a digital PLL (Figures 3, 4, and 5 element 3) both connected to a synchronizing clock generator (Figures 3, 4, and 5 element 2) however, contrary to applicants invention, after initial synchronization control is transferred from the analog PLL to the digital PLL.

**Shimizume et al. (US Patent Number 5,636,192)** also discloses both an analog PLL (Figure 4 element 110) and a digital PLL (Figure 4 element 120), however the analog PLL generates a reference clock that is supplied to the digital PLL circuit. The output of the digital PLL circuit is then supplied to a demodulator. Thus the analog and digital PLL circuits work together to generate a single clock unlike applicant's invention where the analog and digital PLLs are used independently.

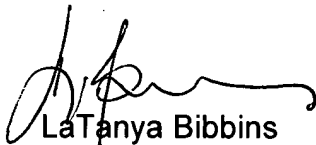
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaTanya Bibbins whose telephone number is (571) 270-1125. The examiner can normally be reached on Monday through Friday 7:30 am - 5:00 pm.

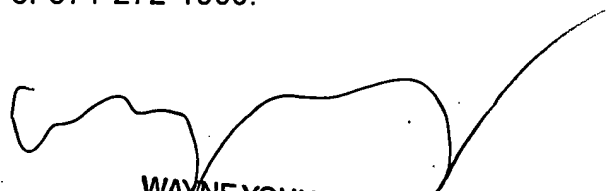
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



LaTanya Bibbins



WAYNE YOUNG  
SUPERVISORY PATENT EXAMINER